

ABSTRACT

A stage assembly (10) for moving and positioning a device (26) is provided herein. The stage assembly (10) includes a stage base (12), a stage (14), a stage mover assembly (16), and a reaction mass assembly (18). The stage mover assembly (16) moves the stage (14) along an X axis and along a Y axis relative to the stage base (12). The reaction mass assembly (18) is coupled to the stage mover assembly (16). Uniquely, the reaction mass assembly (18) reduces the reaction forces created by the stage mover assembly (16) in three degrees of freedom that are transferred to the stage base (12). With this design, stage mover assembly (16) has less influence upon the position of the stage base (12). These features allow for more accurate positioning of the device (26) by the stage assembly (10) and better performance of the stage assembly (10).

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